

We Claim:

- 1) A process for delivering a polynucleotide into a cell of a mammal to inhibit protein expression, comprising:
 - a) making a polynucleotide consisting of a sequence that is complementary to a nucleic acid sequence to be expressed in the mammal;
 - b) inserting the polynucleotide into a vessel in the mammal;
 - c) delivering the polynucleotide to the cell wherein the nucleic acid expression is inhibited.
- 2) The process of claim 1 wherein vessel permeability is increased.
- 3) The process of claim 2 wherein increasing the permeability of the vessel consists of increasing pressure against vessel walls.
- 4) The process of claim 3 wherein increasing the pressure consists of increasing a volume of fluid within the vessel.
- 5) The process of claim 4 wherein increasing the volume consists of inserting the polynucleotide in solution into the vessel.
- 6) The process of claim 1 wherein the vessel consists of a tail vein.
- 7) The process of claim 1 wherein the vessel consists of a bile duct.
- 8) The process of claim 1 wherein the parenchymal cell is a cell selected from the group consisting of liver cells, spleen cells, heart cells, kidney cells and lung cells.
- 9) The process of claim 1 wherein the polynucleotide consists of RNA.
- 10) The process of claim 9 wherein the RNA consists of dsRNA.

- 11) The process of claim 10 wherein the dsRNA consists of siRNA.
- 12) The process of claim 11 wherein the siRNA is injected into the mammal's vessel.
- 13) The process of claim 4 wherein increasing the pressure consists of increasing a volume within the vessel.
- 14) The process of claim 13 wherein the pressure is sufficient to increase organ volume.
- 15) The process of claim 13 wherein the pressure is sufficient to increase extravascular volume.
- 16) The process of claim 1 wherein the vessel consists of a liver vessel.

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